## UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

# MATERIAL SPECIFICATION MS-210: "AGGREGATE FILTERS"

### 210.1 SCOPE

This specification governs the quality of aggregates used for filter materials in drainage systems for subsurface field drainlines, structural drains and/or foundation drains.

### 210.2 QUALITY

The aggregates shall conform to the durability requirements of ASTM C-33.

### 210.3 GRADATION

The gradation shall conform to the requirements for the fine aggregates of ASTM C-33, unless otherwise specified on the drawings.

Gradation for ASTM C-33 fine aggregates:

| Standard Sieve Size | Percent of Material Smaller Than |
|---------------------|----------------------------------|
| 3/8 inch (9.5 mm)   | 100                              |
| #4 (4.75 mm)        | 95 to 100                        |
| #8 (2.36 mm)        | 80 to 100                        |
| #16 (1.18 mm)       | 50 to 85                         |
| #30 (0.60 mm)       | 25 to 60                         |
| #50 (0.30 mm)       | 10 to 30                         |
| #100 (0.15 mm)      | 2 to 10                          |

### 210.4 HANDLING

Equipment and methods shall prevent segregation of sizes or intermixing with other materials.